CLAIM AMENDMENTS

Please amend the claims by amending claims 2, 3 and 26-28, and adding new claims 36-40, all without prejudice, as indicated on the following listing of all the claims in the present application after this Amendment:

1. (Cancelled.)

2. (Currently amended) A method of writing data into a non-volatile memory system of a type having blocks of memory cells that are simultaneously erasable and which individually store a given number of host units of data, comprising:

responding to a plurality of successive host commands to write a number of units of data ~~having non-sequential~~ that individually have sequential logical addresses less than a pre-set proportion of the given number by writing their data ~~having non-sequential logical addresses~~ into a first designated block with sequential physical addresses, and

responding to host commands to write a number of units of data having sequential logical addresses equal to or in excess of ~~a given~~ the pre-set proportion of said given number by writing ~~the~~ their data into a ~~second designated~~ block other than the first designated block.

3. (Currently amended) The method of claim 2, ~~wherein writing data to the first designated block includes writing a number of host units of data into the first designated block~~ which initially comprises:

determining whether or not the successive host commands individually include a number of units of data having sequential logical addresses less than the ~~given~~ pre-set proportion of said given number.

4. (Original) The method of claim 2, wherein the non-volatile memory cells are organized into multiple sub-arrays and said blocks of memory cells include memory cells of two or more of the sub-arrays.

5 – 25. (Cancelled)

26. (Currently amended) The method of claim 2, wherein the ~~given~~ pre-set proportion is set within a range of 25-75 percent of said given number.

27. (Currently amended) The method of claim 3, wherein the ~~given~~ pre-set proportion is set within a range of 25-75 percent of said given number.

28. (Currently amended) A method of writing data into a non-volatile memory system of a type having blocks of memory cells that are simultaneously erasable and which individually store a given number of host units of data, comprising:

dedicating at least a first one of the blocks to store a number of units of data having sequential logical addresses less than a pre-set fraction of said given number,

responding to a plurality of host commands to individually write units of data into the memory system by determining whether ~~having~~ a number of the units of data with sequential logical addresses is less than [[a]] the pre-set fraction, ~~of said given number~~ and, if so, by writing the data into [[a]] the first ~~designated~~ dedicated block, and

responding to host commands to write units of data having a number of sequential logical addresses equal to or in excess of the pre-set fraction of said given number by writing the data into a ~~second designated~~ block other than the first dedicated block.

29. (Previously presented) The method of claim 28, wherein the non-volatile memory cells are organized into multiple sub-arrays and said blocks of memory cells include memory cells of two or more of the sub-arrays.

30. (Previously presented) The method of claim 28, wherein the fraction is set within a range of 25-75 percent of said given number.

31. (Previously presented) A method of operating a non-volatile memory system in response to commands received from a host to individually write logically addressed units of data therein, the memory system having memory cells grouped into blocks that are

simultaneously erasable and which individually store a given number of units of data at individual physical addresses, the logical addresses of received units of data being mapped within the memory system into corresponding physical addresses where the received units of data are stored, comprising:

allocating a first one of the blocks to store units of data having a number of sequential logical addresses less than a fraction of said given number,

allocating a second one of the blocks to store units of data having a number of sequential logical addresses equal to or in excess of the fraction of said given number,

in response to receipt of a command to write data having a number of sequential logical addresses less than said fraction, determining whether the first block has sufficient erased capacity to store the received data and, if so, writing the received data into sequential physical addresses of the first block, and

in response to receipt of a command to write data having a number of sequential logical addresses equal to or in excess of said fraction, determining whether the second block has erased capacity to store the data and, if so, writing the data into sequential physical addresses of the second block.

32. (Previously presented) The method of claim 31, additionally comprising:

in response to receipt of the command to write data having a number of sequential logical addresses less than said fraction, if the first block does not have sufficient erased capacity to store the received data, allocating a third one of the blocks to store units of data having a number of sequential logical addresses less than a fraction of said given number and then writing the received data into sequential physical addresses of the third block, and

in response to receipt of the command to write data having a number of sequential logical addresses equal to or in excess of said fraction, if the second block does not have sufficient erased capacity to store the received data, allocating a fourth one of the blocks to store units of data having a number of sequential logical addresses equal to or in excess of the fraction of said given number and then writing the received data into sequential physical addresses of the fourth block.

33. (Previously presented) The method of claim 32, wherein the fraction is set to be within a range of 25-75 percent of said given number.

34. (Previously presented) The method of claim 31, wherein the non-volatile memory cells are organized into multiple sub-arrays and said blocks of memory cells include memory cells of two or more of the sub-arrays.

35. (Previously presented) The method of claim 31, wherein the fraction is set to be within a range of 25-75 percent of said given number.

36. (New) A method of writing data into a non-volatile memory system of a type having blocks of memory cells that are simultaneously erasable and which individually store a given number of host units of data, comprising:

designating at least a first one of the blocks to store a number of units of data received by the memory system with individual ones of multiple write commands that have sequential logical addresses less than a pre-set fraction of said given number,

responding to the receipt of multiple commands by the memory system to individually write one or more units of data thereinto by, for individual commands,

(a) determining whether the command specifies the writing of a number of units of data having sequential logical addresses that is less than the pre-set fraction, and

(b) determining whether the first block has enough erased capacity to store the number of units of data provided with the command, wherein

when both of conditions (a) and (b) above are determined to exist, thereafter writing the units of data into the first block, but

when either one of conditions (a) or (b) above is determined not to exist, writing the units of data into one of the blocks other than the first block.

37. (New) The method of claim 36, wherein the pre-set fraction is within a range of 25-75 percent of said given number.

38. (New) The method of claim 36, additionally comprising:

designating at least a second one of the blocks to store a number of units of data received by the memory system with individual ones of multiple write commands that have sequential logical addresses equal to or greater than the pre-set fraction, and

responding to the receipt of multiple commands by the memory system to individually write one or more units of data thereinto by additionally, for individual commands,

(c) determining whether the command specifies the writing of a number of units of data greater than the given number, wherein

when neither of the conditions (a) nor (c) above exist, writing the units of data into the second block, without regard to whether condition (b) exists or not, but

when the condition (c) above is determined to exist, writing the units of data into one of the blocks other than the first or second blocks.

39. (New) The method of claim 38, wherein the pre-set fraction is set to be within a range of 25-75 percent of said given number.

40. (New) In a non-volatile memory system having memory cells grouped into blocks that are simultaneously erasable and which individually store a given number of units of data at individual physical addresses, the logical addresses of received units of data being mapped within the memory system into corresponding physical addresses where the received units of data are stored, a method of operation in response to received commands to individually write logically addressed units of data therein, comprising:

designating a first one of the blocks to store units of data having a number of sequential logical addresses less than a pre-determined fraction of said given number,

designating a second one of the blocks to store units of data having a number of sequential logical addresses equal to or in excess of the fraction of said given number,

providing at least another one of the blocks that is fully erased, and

in response to receipt of a command to write data into the memory system, identifying the number of units of the data that have sequential logical addresses, determine whether the number of such units with sequential logical addresses are less than the fraction, and, if so,

writing the data to the first of the blocks, but if the amount of data is not less than the fraction, then

writing the data to the second of the blocks if there is sufficient capacity therein, but if there is not sufficient capacity in the second of the blocks, writing the data to the fully erased block.